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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,244	07/15/2003	Kyoung Ho Choi	51876P371	1275

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EXAMINER	
BLUDAU, BRANDON S	

ART UNIT	PAPER NUMBER
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/621,244	CHOI ET AL.	
	Examiner	Art Unit	
	Brandon S. Bludau	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to amendment filed 05 February 2007. Claims 1,2 and 9 have been amended. Claim 10 is new and no claims have been cancelled, thus, claims 1-10 remain pending.

Claim Objections

2. Claims 1 and 5 is objected to because of the following informalities: (1) there should be commas after the first "terminal" in steps b and c; (5) it is unclear what is to be considered in line 2, whether it is to be read "at predetermined times" or "a predetermined number of times". Appropriate correction is required.

Response to Arguments

3. Applicant's arguments with respect to particular claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection. See new rejection below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altschuler (US Patent 5,615,266) and further supplemented by Mauro II (US Patent 7133696).

5. As per claim 1, Altschuler discloses a method for automatically entering into a secure communication mode in a wireless communication terminal, comprising the steps of:

b) at a transmission terminal, receiving a request for a secure communication from a user and transmitting the token to a reception terminal; and

c) at the transmission terminal, entering into a secure communication mode based on an acknowledge token transmitted from the reception terminal, and performing secure communication with the reception terminal (column 4 line 46 – column 5 line 10 and column 6 lines 6 –37).

Altschuler does not specifically disclose step a) generating a token including a token header, the token header being based on a data having the lowest occurrence of generation among the voice data outputted from a vocoder of the wireless communication terminal. Altschuler discloses a method of initiating a secure communication mode using a tone distinctive from tones used in transmitting the voice data (column 4 lines 59-64). It would be obvious for one of ordinary skill in the art to modify Altschuler to include wherein the distinctive tone is one of a lowest frequency generated from the vocoder (which is discussed as a common feature for voice communication in column 3 line 63-65). The distinctive tone of Altschuler is the same nature of the data used to transmit voice data, yet it is distinguishable from the voice data so that the terminal may initiate secure mode. The Examiner admits that the tone signal, functioning as a "token", doesn't necessarily include a header, however, in packet communication it would necessarily have been obvious to include wherein the

header is the "signal" indicating secure mode. The functionality of Altschuler is similar to the immediate application, and one of ordinary skill in the art may find it obvious to generate a distinctive signal based on data that is rarely generated, as this would be a distinctive signal that may initiate secure communication mode.

Moreover, Mauro includes a similar method of changing operational mode to secure mode wherein a "special" voice packet is communicated among normal voice packets, wherein the "special" packet contains a predetermined sequence of bits that specifies a change of operation mode (column 2 lines 3-15 and column 5 lines 1-23). Mauro is specifically directed to voice packet communications, and thus it is argued that packets necessarily include a header, and it may be deduced that the header necessarily includes this predetermined sequence so as to indicate that it is a "special" packet, as is commonly performed in the art. In view of column 5 lines 17-23 it may be argued that the predetermined sequence of bits is necessarily the header for a packet containing as payload the other data discussed. The packet header in Mauro is predetermined, thus it is not generated based on a lowest occurrence of voice data output from the vocoder, however, the Examiner argues the same logic as discussed above with Altschuler. Even though the sequence of bits is predetermined, it may necessarily be based on a sequence of bits with a very low rate of occurrence. This is necessarily a highly desired characteristic of the method. It is necessary that the predetermined sequence of bits be discernable from previous sequences so as to effectively indicate the specialized packet. One of ordinary skill in the art may find this to be a necessary requirement in line with the preceding argument. Mauro is not

necessarily used to overcome any perceived deficiency of Altschuler, but it primarily used to enhance Altschuler to demonstrate a similar method necessarily embodying packet communication with a unique header.

6. Claim 9 is rejected because it discloses similar subject matter to claim 1.

7. As per claim 10, Altschuler and Mauro disclose the method of claim 1, further comprising:

Combining the data, by a predetermined length, that have the lowest occurrence of generation among the voice data to form the token header.

As discussed above, Neither Altschuler nor Mauro specifically discuss the token header being formed by data of the lowest occurrence of generation, however it is argued that this may necessarily be a desired requirement so as to effectively indicate the "specialized" packet, thus it would have been obvious to one of ordinary skill in the art to implement such method of generating a token using data with the lowest frequency of occurrence as may necessarily be desired.

8. Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altschuler (US Patent 5,615,266) in view of Mauro and further in view of Kung (US 6,889,321).

9. As per claim 2, Altschuler discloses the method as recited in claim 1, but does not disclose wherein the token includes a data having the lowest generation occurrence among the data of voice packet data outputted from the vocoder as a token header.

Kung discloses a method of generating a token for entering secure communication mode, wherein in view of the arguments above, it would be necessary

that the secure signal may be the packet header for signaling initiating the secure mode (column 32 lines 30-49 wherein it is well known and established in the art for using packet headers to distinguish packet data such as a secure mode initiation data as discussed).

Kung is analogous art because it is directed to a method of protecting telephony calls using encryption.

It would be obvious in view of the arguments above for one of ordinary skill in the art to modify Altschuler to include wherein the secure mode initiation signal is embodied in a packet header.

Motivation for one of ordinary skill in the art to modify Altschuler as discussed above would be to implement a method wherein a packet header distinguishes normal voice data from secure data so as to signal an initiation into secure communication mode as is evident in the art as discussed.

Moreover, in view of the arguments above pertaining to Mauro, the Examiner argues that Mauro necessarily includes a packet header based on a predetermined sequence of bits, which may obviously be a sequence that has a low occurrence of generation so as to effectively identify the "token".

10. As per claim 3, Altschuler discloses the method as recited in claim 1, but does not disclose wherein the token is shorter than the maximum length of the data outputted from the vocoder.

The examiner notes that it is a common occurrence in the art to generate packets that are shorter than the maximum length supported by the communication protocol or

processor. This would be evident in view of Kung wherein the initiating packet carries a key that may necessarily be of shorter length than the voice data to be encrypted.

Kung is analogous art as discussed above in rejection to claim 2. Motivation for combing Kung and Altschuler are also discussed above.

11. As per claim 4, Altschuler discloses the method as recited in claim 3, wherein the token includes a key used in an encryption algorithm for the secure communication (Altschuler: column 7 lines 6-37 and Kung: column 33 lines 8-15 and Mauro column 5 lines 17-23).

12. As per claim 5, Altschuler discloses the method as recited in claim 1, wherein in the step b), the token is transmitted repeatedly at predetermined times (column 5 lines 30-35 wherein the secure signal is transmitted repeatedly until secure signal is noticed at the receiving terminal).

13. As per claim 6, Altschuler discloses the method as recited in claim 5, wherein in the step b), the repeated transmission of the token stops when the acknowledge token transmitted from the reception terminal is received (column 4 line 46 – column 5 line 10 and column 6 lines 6 –37 wherein it is commonly practiced in packet networks as discussed in view of Kung (see claim 2) to generate and receive acknowledge packets signifying the data was properly received at the reception terminal).

14. As per claim 7, Altschuler discloses the method as recited in claim 1, further comprising the steps of:

f) at the reception terminal checking out if the token transmitted from the transmission terminal is received, and transmitting the token formed in the step a) as an acknowledge token to the transmission terminal; and

g) at the reception terminal entering into a secure communication mode and performing secure communication with the transmission terminal (column 4 line 46 – column 5 line 10 and column 6 lines 6 –37 wherein it is commonly practiced in packet networks as discussed in view of Kung (see claim 2) to generate and receive acknowledge packets signifying the data was properly received at the reception terminal).

15. As per claim 8, Altschuler discloses the method as recited in claim 7, wherein the step f) includes the step of:

h) checking out if a session key generated in the transmission terminal and included in the token is matched with a session key generated in the reception terminal using a master key (column 7 line 65 – column 8 line 66).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gustafson (US Patent 5696880) and Terpening et al (US Patent 6044158).

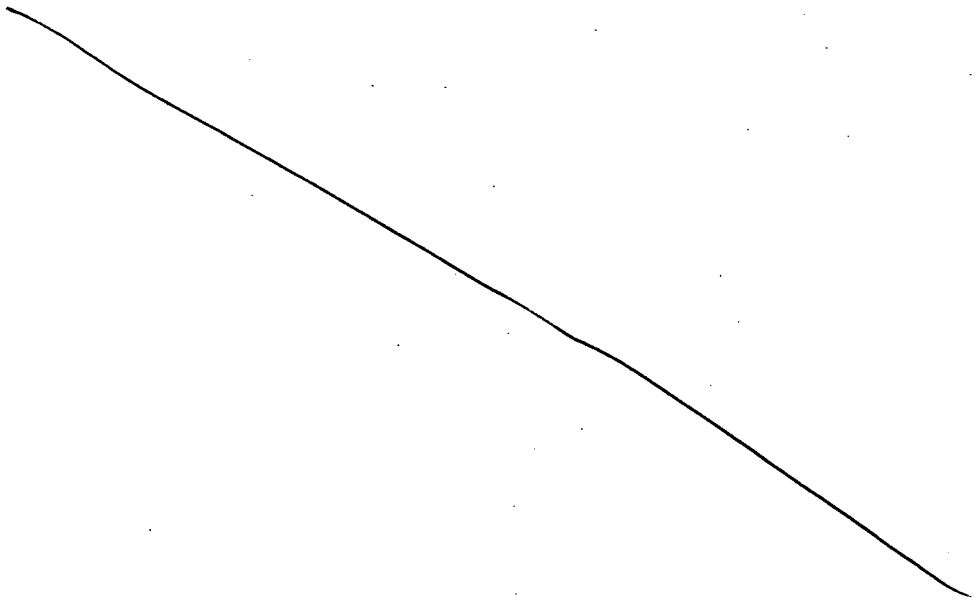
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Bludau whose telephone number is 571-272-3722. The examiner can normally be reached on Monday -Friday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Brandon S Bludau
Examiner
Art Unit 2132

BB
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